PLAN OF THE THESIS

The work entitled Taxonomic revision of the genus *Murdannia* Royle (Commelinaceae) in India is the result of extensive field and herbarium studies carried out during the period 2008–2013. The thesis is presented in 6 chapters.

The chapter 1 begins with an introduction dealing general features of Commelinaceae and the genus *Murdannia* followed by the relevance of the study, review of literature and area of present study. In the review of literature, earlier taxonomic and extra taxonomic treatments on the genus are briefly discussed. The materials and methods are presented in chapter 2.

The systematic treatment is presented in chapter 3. It includes correct nomenclature, typification, citation, relevant synonymy, detailed description, ecology and distribution on the genus. An artificial key to the species of *Murdannia* in India is also provided. The species are treated alphabetically. For each species correct nomenclature, typification, citation, relevant synonymy, detailed description, chromosome number, phenology, ecology and distribution are provided. Only those floras whose voucher materials consulted are included in the citations. Notes on nomenclature are given wherever found necessary. The list of specimens examined from the area of study is given at the end of each species. They are cited by state, district, and place in the alphabetical order followed by the date of collection, name of collector and the acronym of the herbaria where it is deposited. Illustrations, photo plates, type photographs and distribution maps are provided for most of the species.

SEM studies of seeds and its significance in the taxonomy of *Murdannia* is given in chapter 4. The foliar epidermal studies and their
taxonomic significance are discussed in chapter 5. A discussion on comparative morphology and the summary of the investigation are presented in chapter 6. A morphometric analysis of twenty six Indian species of *Murdannia* is also included in this chapter.

Seven appendices are given, dealing with the list of papers published/communicated, list of herbaria consulted, model data sheet of *Murdannia*, list of floras consulted, the distribution, the chromosome numbers and the data matrix for morphometric analysis of Indian species of *Murdannia*. The bibliography on literature cited and an index to scientific names are provided at the end.